

IN THE SPECIFICATION (instructions at **)

** On page 5, line 16, amend the paragraph and add a new paragraph (Figure 13) thereafter.

Fig. 12 shows a circuit diagram of apparatus for performing a pre-magnetisation procedure[.];

A1 and

Figure 13 shows a face view of an alternative transducer assembly side of an alternative disc to that shown in Figure 1.

** On page 7, line 20, amend the two paragraphs as follows:

Referring again to Fig. 2 the radial field M_r can be detected by a sensor 26a,26b,26c,26d radially oriented, and the M_s component measured by a sensor [[1]] 28a,28b,28c,28d at right angles to the radial direction. These sensors will be placed in fixed positions with respect to the disc rotating past them in non-contacting fashion.

A2 Depending on the drive arrangement and the distribution of stresses in the disc more pairs of non-contacting sensors 26a,26b,26c,26d, and 28a,28b,28c,28d may be provided angularly displaced around the disc. Fig. 2 shows four such pairs of non-contacting sensors.

** On page 9, line 17, amend the paragraph:

A3 To improve the magnetic efficiency of the disc the non-sensor side can have the magnetic path at transducer region closed by at least an annulus 38 of high permeability material acting between regions 12 and 14. The part [[1]] 30 may itself provide this function.

** On page 12, line 24, amend the paragraph.

A4 Other modifications may be made to the torque sensor arrangements so far described. The disc-like structures discussed above have been complete annuli about the axis, at least where the magnetic transducer element is to be formed. It is possible, however, that the disc-like structure and

the magnetised region(s) could be broken in one or more places, as shown in Figure 13. The requirement is that there be material of the structure extending over at least an angular sector through which a torque transmission path extends and which is capable of magnetisation in one of the ways described above to provide a torque-dependent magnetic field output. The interruption of the annular path into one or more angularly offset sectors may be used to provide a pulse-type of output as the disc-like structure rotates relative to the sensor system so that speed as well as torque measurement may be made.
